

### **REMARKS**

In this Amendment, Applicant has cancelled Claims 27 – 28, 31 – 33, 38 – 39 and 42 – 44, without prejudice or disclaimer, and amended Claims 23 – 26, 29 – 30, 34 – 37, and 40 – 41. Claims 23 – 26, 29 – 30, 34 – 37, and 40 – 41 have been amended to overcome the rejections and further species the embodiments of the present invention. It is respectfully submitted that no new matter has been introduced by the amended claims. All claims are now present for examination. Favorable reconsideration is respectfully requested in view of the preceding amendments and the following comments.

#### **REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH:**

Claims 23, 24, 28, 29, 30 – 35 and 39 – 44 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the invention was filed, had possession of the claimed invention.

It is respectfully submitted that in view of presently claimed invention, the rejection has been overcome. In particular, Claims 28, 31 – 33, 39 and 42 – 44 have been cancelled, without prejudice or disclaimer, the rejections to these claims are moot. In addition, the amended Claims 23 and 34 and their corresponding dependent claims clearly defined that “Y<sub>2</sub> represents a NH group”, which has the support from the specification (page 1, line 17; page 2, line 2, line 21; page 34 – 40, Table 1, Compounds No. 1 – 17, 19 – 44, 46 – 97). In addition, Y<sub>2</sub> represents “a nitrogen atom” when R<sub>2</sub> and Y<sub>2</sub> form a homopiperidinyll group, which has support from the specification (page 1, line 17; page 3, lines 1 – 3). Furthermore, Claims 23 and 34 and their dependent claims have also been amended to define that “Y<sub>1</sub> represents a tertiary amino group and forms with R<sub>1</sub> a morpholinyl or homopiperidinyll group, and Y<sub>2</sub> represents a nitrogen atom and forms with R<sub>2</sub> a homopiperidinyll group”, which is sufficiently supported by the specification

(page 3, lines 1 – 3). Finally, Claims 30 and 41 have been amended to correct the clerical errors in the spelling of the second and third species to read as “N-cyano-N'-[(2-metatuluylamino-5-nitrobenzene)sulfonyl]homopiperidinoamidine” and “N'-[(2-cycloheptylamino-5-nitrobenzene)sulfonyl]N'-cyclohexyl thiourea”, which have support in the specification (page 4, lines 19 – 21). Therefore, rejections to Claims 23, 24, 28, 29, 30 – 35 and 39 – 44 under 35 U.S.C. § 112, first paragraph on above grounds have been overcome.

Claims 23 – 25, 27 – 29, 31 – 36, 38 – 40 and 42 – 44 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the invention was filed, had possession of the claimed invention.

Applicant respectfully submits that the rejections have been overcome through the above cancellation and amendments. At first, Claims 28, 31 – 33, 39 and 42 – 44 have been cancelled, without prejudice or disclaimer; the rejections to these claims are moot. In addition, Claim 23 and their corresponding dependent claims have been amended to delete “radio-labeled” and to define that “R<sub>1</sub> and R<sub>2</sub>, which can be identical or different, represent each independently a saturated or unsaturated linear or branched alkyl group with 2 to 12 carbon atoms”, which is supported by the specification (page 1, lines 20 – 21; page 2, lines 22 – 29). Therefore, rejections to Claims 23 – 25, 27 – 29, 31 – 36 38 – 40 and 42 – 44 under 35 U.S.C. § 112, first paragraph on above grounds have been overcome.

Accordingly, withdrawal of the rejection under 35 U.S.C. § 112 first paragraph is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH:

Claims 23 – 25, 27 – 29, 31 – 36, 38 – 40 and 42 – 44 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant traverses the rejection.

It is respectfully submitted that in view of presently claimed invention, the rejection has been overcome. In particular, Claims 28, 31 – 33, 39 and 42 – 44 have been cancelled, without prejudice or disclaimer, the rejections to these claims are moot. In addition, Claims 23, 34 and their dependent claims have been amended to clarify that  $R_1$  and  $R_2$  represent each independently “an aryl group optionally substituted by one or several alkyl groups with 1 to 4 carbon atoms”. Further more, Claims 25 and 36 have been amended to delete the requirement that “ $Y_2$  represents an oxygen atom.” Therefore, rejections to Claims 23 – 25, 27 – 29, 31 – 36, 38 – 40 and 42 – 44 under 35 U.S.C. § 112, second paragraph on above ground have been overcome.

In addition, Claims 23 – 44 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant traverses the rejection. The following amendments have been made to relevant claims, which overcome the cited rejections:

- a) “Derivatives” in Claims 23 – 44 have been amended to “compound”, as suggested by the Examiner;
- b) “-N-CN or -CH-NO<sub>2</sub>” in Claims 23, 34 and their dependent claims have been amended to “= N – CN or = CH – NO<sub>2</sub>”;
- c) The definitions of  $R_1$  in Claims 23, 34 and their dependent claims have been amended to clarify that “ $R_1$  is selected from a group consisting of m-toluy, phenyl and cyclooctyl”;
- d) As in c), the definitions of  $R_1$  in Claims 23, 34 and their dependent claims have been amended to clarify that “ $R_1$  is ... cyclooctyl”;

- e) Claims 23, 34 and their dependent claims have been amended to exclude the species “N-[(2-cyclooctylamino-5-cyanobenzene)sulfonyl] N'-isopropyl urea”;
- f) The definitions of X in Claims 24 and 35 have been amended to clarify that “X is selected from a group consisting of nitro, cyano, bromo and iodine group”;
- g) “Adamantly” in Claims 26 and 37 have been amended to “adamantyl” to correct the clerical error; and
- h) “Cyclohexen-2-yl” in fourth species of Claims 30 and 41 has been amended to “2-cyclohexen-2-yl”, whose antecedent basis has been provided due to the amendments to Claims 23 and 34. The support can be found on page 22, line 7 of the specification.

Therefore, rejections to Claims 23 –44 under 35 U.S.C. § 112, second paragraph on above ground have been overcome.

Accordingly, withdrawal of the rejection under 35 U.S.C. § 112 second paragraph is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 102:

Claims 23, 24, 28, 29, 31, 34, 35, 39, 40 and 42 have been rejected under 35 U.S.C. § 102 (e) as allegedly being anticipated by Muller et al. (US 6,200,934), hereinafter Muller. Applicant traverses the rejection and respectfully submits that the present-claimed invention is not anticipated by the cited reference.

At first, Claims 28, 31, 39 and 42 have been cancelled, without prejudice or disclaimer, the rejections to these claims are moot. In addition, Claims 23, 34 and their dependent claims 24, 29, 35 and 40 have been amended to define that “Y<sub>1</sub> represents a tertiary amino group and forms with R<sub>1</sub> a morpholinyl or homopiperidinyl group, and Y<sub>2</sub> represents a nitrogen atom and forms with R<sub>2</sub> a homopiperidinyl group”. Muller does not disclose the compounds or composition with such groups. In addition, the general

formula (I) as defined in Claims 23 and 34 requires X at a specific position in the structure which represents nitro, cyano or halogen group (either radio-labeled or not). Muller does not disclose the compounds or composition meet such requirement. Therefore, the newly presented claims are not anticipated by Muller and the rejection under 35 U.S.C. § 102 (e) has been overcome.

REQUEST FOR INTERVIEW

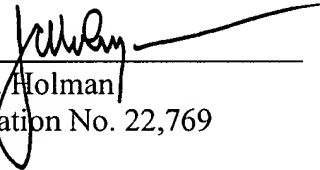
Applicant respectfully requests either a telephonic or an in-person interview should the applicant as presently amended not be in condition for allowance.

Having overcome all outstanding grounds of rejection, the application is now in condition for allowance, and prompt action toward that end is respectfully solicited.

Respectfully submitted,

JACOBSON HOLMAN PLLC

Date: March 9, 2004  
(202) 638-6666  
400 Seventh Street, N.W.  
Washington, D.C. 20004  
JCH/jc  
Atty. Dkt. No.: P66806US0

By   
John C. Holman  
Registration No. 22,769